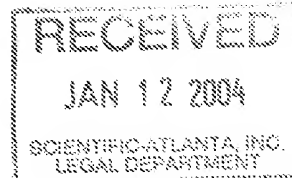


# PATENT COOPERATION TREATY



From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
KENNETH M. MASSARONI  
SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
5030 SUGARLOAF PARKWAY  
LAWRENCEVILLE, GA 30044

## PCT

### WRITTEN OPINION

(PCT Rule 66)

*Deadline 2/4/04*

Date of Mailing (day/month/year) <b>04 DEC 2003</b>	
REPLY DUE within 2 months/days from the above date of mailing	
Applicant's or agent's file reference <b>F-7018-PC</b>	
International application No. <b>PCT/US02/28212</b>	International filing date (day/month/year) <b>05 September 2002 (05.09.2002)</b>
Priority date (day/month/year) <b>06 September 2001 (06.09.2001)</b>	
International Patent Classification (IPC) or both national classification and IPC <b>IPC(7), H04N 7/173 and US Cl.: 725/8</b>	
Applicant <b>SCIENTIFIC-ATLANTA, INC.</b>	

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

3. The applicant is hereby **invited to reply** to this opinion.
 

**When?** See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).~~

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 *bis*.  
For an informal communication with the examiner, see Rule 66.6

**If no reply is filed**, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 06 January 2004 (06.01.2004)

Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer  Andrew Faile Telephone No. (703) 305-4700
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------

# WRITTEN OPINION

International application No

PCT/US02/28212

## I. Basis of the opinion

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☒ the description:  
 pages 1-24, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
 pages 25-33, as originally filed  
 pages NONE, as amended (together with any statement) under Article 19  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
 pages 1-17, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages NONE, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_

### 2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

### 3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

### 5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

**V.1. Reasoned Statements:**

The opinion as to Novelty was positive (Yes) with respect to claims 3-13, 18-30, 33, 35-36, 41-59, 61, 64, 66-67, 73-89  
The opinion as to Novelty was negative (No) with respect to claims 1-4, 14-17, 31, 32, 34, 37-40, 60, 62, 63, 65, and 68-72  
The opinion as to Inventive Step was positive (Yes) with respect to claims NONE  
The opinion as to Inventive Step was negative (NO) with respect to claims 1-89  
The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-89  
The opinion as to Industrial Applicability was negative (NO) with respect to claims NONE

**V. 2. Citations and Explanations:**

Claims 1-4, 14-17, 31, 32, 34, 37-40, 60, 62, 63, 65, and 68-72 lack novelty under PCT Article 33(2) as being anticipated by U.S. Patent 6,157,377 to Shah-Nazaroff et al. (Shah-Nazaroff).

Regarding claims 1-4, 34, 40, 60, 65, 71, and 72, Shah-Nazaroff teaches a system that enables users to receive enhancements (such as upgraded audio and video) to view on demand (which reads on Video-On-Demand) (see col. 2, ll. 25-38), while charging the user for the service (in this case video on demand -VOD) along with the charging an additional fee for the enhancements, as shown in figures 4-5. Further Shah-Nazaroff teaches displaying the services and enhancements on a single screen wherein the user input would be received prior to the start of the service.

Regarding claims 14-17, Shah-Nazaroff teaches a plurality of service enhancements such as picture quality and audio quality, (fig. 5, col. 6, ll. 16-40).

Regarding claims 31, 32, 62, and 63, Shah-Nazaroff teaches client systems (fig. 1) that is located at the customer premise and has a storage device (fig. 6, col. 6, ll. 49-61).

Regarding claims 37-39, and 68-70, Shah-Nazaroff teaches a display device such as a television (fig. 6, label 602), and a remote control for user input (col. 7, ll. 14-19).

Claims 3-13, 18-30, 33, 35-36, 41-59, 61, 64, 66-67, and 73-89 lack an inventive step under PCT Article 33(3) as being obvious over U.S. Patent 6,157,377 to Shah-Nazaroff et al. (Shah-Nazaroff).

Regarding claims 5-6, 35-36, and 66-67, Shah-Nazaroff is silent on receiving the second user input after the start of or during the television service. Providing enhancements after the start of or during the television service is well known in the art. Accordingly, it lacks an inventive step to provide enhancements after the start of a television service or during the television service in order to enable the user to customize the programming on the fly thereby creating a more user friendly system.

Regarding claim 7, Shah-Nazaroff teaches blanket upgrades (col. 4-5, ll. 61-3) but is silent on identifying the option as previously selected. Identifying previously selected options is well known in the art. Therefore, it lacks an inventive step to identify previously selected options in order to provide active feedback of selected options thereby facilitating the user in the selection process.

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Regarding claims 8-9, Shah-Nazaroff teaches a plurality of options (fig. 5), but is silent on displaying the selected options with an icon or a background color. Use of icons and background colors are well known in the art. Accordingly, it lacks an inventive step to use icons or background colors in order to indicate selections.

Regarding claim 10, Shah-Nazaroff teaches a processing server (310) which indexes the information (col. 4, ll. 26-32), but is silent on options configured by a system operator. System operators are well known in the art. Accordingly, it lacks an inventive step to have a system operator to configure the options of Shah-Nazaroff in order to further customize the system.

Regarding claims 11-13, Shah-Nazaroff teaches using a single screen (fig. 5), but is silent on multiple screen. Changing the number of screen lacks an inventive step, wherein one would be motivated to make the changes in order to increase the usability of the system.

Regarding claims 18-22, Shah-Nazaroff is silent on service enhancements based on number of times requested, subscription for enhancements, frequency of enhancements, usage period, or length of time the enhancement is made available. Each of these variations is well known in the art. Therefore, it lacks an inventive step to provide a variety of service enhancements for billing purposes in order to entice the user to use the enhancements.

Regarding claims 23-24 and 61, Shah-Nazaroff is silent on a second application for the enhancements. Using a second application for additional or supplemental services is well known in the art. Therefore, it lacks an inventive step to use another application such as a child application in order to reduce the overall size of the parent application while simultaneously enabling upgrades to the software with different modules.

Regarding claims 25-30, Shah-Nazaroff is silent on using a compatibility identifier. Use of a compatibility identifiers (such as HANDLE, or pointers) are well known in the art. Further, identifying a compatibility group, parent application, use of fields or words are all well known in the art. Accordingly, it lacks an inventive step to use of a compatibility identifiers, identifying a compatibility group, parent application, or use of fields or words in order to efficiently determining the child application and maintain data integrity.

Regarding claims 33 and 64, Shah-Nazaroff is silent on a second application downloaded only if the first application is stored. Downloading applications contingent upon another application is well known in the art. Therefore, it lacks an inventive step to download a second application when the first application is stored.

Regarding claims 41- 43, 46, 48-59, 73, 74, 77, and 79-89, Shah-Nazaroff is silent on user selected language, trick mode, rental extensions, pop-up comments, construct a shopping list, parental control, indexed VOD titles, search and preview VOD titles and television programs, IPG, IPG providing currently tuned channels and time listings, received previously and future broadcasted programs, and configure the IPG. All of these features are well known. Accordingly, it lacks an inventive step to modify Shah-Nazaroff with these features in order to aid the user in selecting and navigation of programming of programming while simultaneously providing additional features and increasing the usability.

Regarding claims 44-45, 47, 75-76, and 78, Shah-Nazaroff teaches enhanced resolution and recording the presentations (col. 2, ll. 39-52, fig. 5, col. 6, ll. 22-30). Shah-Nazaroff teaches a list of VOD programs, which equates to a VOD catalog.